

VZCZCXYZ0000
RR RUEHWEB

DE RUEHKI #0646/01 2191629
ZNR UUUUU ZZH
R 061629Z AUG 08
FM AMEMBASSY KINSHASA
TO RUEHC/SECSTATE WASHDC 8276
RUEHLS/AMEMBASSY LUSAKA 1463
RUEHSA/AMEMBASSY PRETORIA 4101
INFO RUCPDO/DEPT OF COMMERCE WASHDC
RHEBAAA/DEPT OF ENERGY WASHDC
RUEHC/DEPT OF LABOR WASHDC
RUEAIIA/CIA WASHDC
RHEFDIA/DIA WASHDC
RUZEJAA/JAC MOLESWORTH RAF MOLESWORTH UK
RHMFISS/HQ USEUCOM VAIHINGEN GE
RUEHBJ/AMEMBASSY BEIJING 0087
RUEHBY/AMEMBASSY CANBERRA 0036
RUEHLO/AMEMBASSY LONDON 0167
RUEHMO/AMEMBASSY MOSCOW 0060
RUEHFR/AMEMBASSY PARIS 1200
RUEHOT/AMEMBASSY OTTAWA 0123
RUCNSAD/SADC COLLECTIVE
RUEHXR/RWANDA COLLECTIVE
RUEHZO/AFRICAN UNION COLLECTIVE

UNCLAS KINSHASA 000646

SIPDIS
SENSITIVE

STATE PLEASE PASS USAID
STATE PLEASE PASS USGS
STATE PLEASE PASS OPIC FOR JIM WILLIAMS
DEPT FOR AF/S, EEB/ESC AND CBA
DOE FOR SPERL AND PERSON
E.O. 12958: N/A
TAGS: [EMIN](#) [ENRG](#) [EINV](#) [EIND](#) [ETRD](#) [ELAB](#) [CG](#) [ZA](#) [SF](#)
SUBJECT: DRC COPPERBELT - TENKE FUNGURUME MINING MAKES NO SMALL
PLANS

REF: A) KINSHASA 515
B) LUSAKA 666
C) LUSAKA 744

¶1. (U) This cable represents innovative collaboration in resource reporting and commercial advocacy between Embassies Pretoria, Kinshasa, and Lusaka. It is the fourth in a series of six cables on the Democratic Republic of the Congo (DRC)/Zambia Copperbelt (reftels).

¶2. (SBU) SUMMARY: The Tenke Fungurume Mining (TFM) copper-cobalt mine in the DRC's Katanga Province is a mega-project in many ways. U.S.-based Freeport-McMoRan's estimated USD 1.9 billion investment represents the largest U.S. investment underway in southern Africa and will be the largest mine in the region. The project aims to initially produce 115,000 tons per annum of copper and 8,000 tons per annum of cobalt, with potential to ramp up production by a factor of four. Part of the ample investment represents funds for power and local infrastructure in this underdeveloped region. Transportation, power, and government intervention represent significant risks to the project. Freeport remains concerned about the pending license review (Ref A), but continues to mine and build its processing plant in anticipation of production later this year. Tenke Fungurume Mining (TFM) asserts it has put in place substantial social development investment and is committed to zero discharge of waste from its tailings reservoir. End Summary.

¶3. (SBU) Embassy Pretoria Minerals/Energy Officer and Specialist visited mines on both sides of the DRC/Zambia copperbelt May 12-23 to assess developments in the sector, covering six mines in the DRC and four in Zambia. Ref A provided an executive summary of developments on both sides of the border of the copper-cobalt belt. Companies were helpful in supporting the well-received visits. Embassy Kinshasa Economic Assistant accompanied the team for a May 12-14 visit to the Tenke Fungurume mine under development west of

Lubumbashi in the Katanga Province of the copper-cobalt belt. Processing General Manager Sam Rasmussen hosted the team's visit.

¶4. (SBU) The Tenke Fungurume deposits lie on the northern edge of a belt of folds comprising the geologically famous Lufilian Arc that stretches 500 kilometers across the DRC and Zambia. TFM's high-grade copper-cobalt deposits occur in a sequence of sedimentary rocks known as the "Mines Groups" that are between 1050 million and 650 million years old. TFM Chief Geologist Wolfram Schub described Tenke Fungurume's geology as a unique series of complex geological phenomenon of sedimentation and successive infiltration of salts, oxidants, organics, and other chemicals, in advance of tectonic action. DRC copper and cobalt mining parastatal GECAMINES and precursors previously owned mining rights at Tenke Fungurume, but the state focused its mining activities more intensely elsewhere in the DRC, so the current project is effectively a greenfield endeavor. Freeport McMoRan International (FMI) holds an effective 57.75 percent stake, in partnership with Vancouver-based Lundin Mining (24.75 percent) and parastatal GECAMINES (17.5 percent).

Massive Investment

¶5. (SBU) FMI announced on April 22 that investment in TFM would nearly double the previous estimate to USD 1.9 billion, as a result of scope changes and additional infrastructure, reflecting its commitment to this long-life, remote project. TFM has already invested more than USD 600 million to date. (Note: TFM officials have more recently suggested the total will likely be closer to USD 1.7 billion. End note.) Tenke Fungurume's oxide ore is associated with a harder silicified limestone that forms numerous domed

outcrops throughout the lease area, of which three have been evaluated. These are amenable to mining using a unique USD 1.6 million U.S. Vermeer surface miner. The miner's rotating drum is studded with titanium-hardened steel picks that fragment ore and waste rock down to a depth of 0.6 meter. At the completion of the cut, the rock is selectively removed by front-end loader and transported to respective waste and ore stockpiles in advance of the start-up of processing. Mining has begun on the first such outcrop known as Kwatebala. TFM has ordered a second machine and additional spare parts, now en route to the mine, both as a back-up for the first machine and in anticipation of future mining phases. The substantial processing investment will include five sulfuric acid leaching tanks, neutralization tanks, solvent extraction and "electro-winning" plants to produce copper cathode, and a cobalt refinery to produce cobalt hydroxide. Transportation and egress of products will be one of the biggest challenges given poor roads in the DRC. Phase I alone will require 450 trucks to carry copper cathode to the port in Durban, South Africa.

¶6. (SBU) A primary driver of the increase in TFM's investment is the need to build roads and power infrastructure. FMII will make a loan to the Congolese national power utility (SNEL) to fund investment in regional power infrastructure, including provision of expanded electrical power-generation capacity and improved power reliability. FMI's Rasmussen told the team that TFM will refurbish two of four turbines at the N'seke hydroelectric facility, providing 250 MW of capacity, of which TFM will use 80 MW for its mining and processing plant.

Doing the Right Thing - Social Development

¶7. (SBU) TFM says it is committed to the Equator Principles and referred to its compliance with the international NGO's Pact (located in 60 countries and focused on capacity building) and International SOS (leading provider of international health care) to implement a robust social development program, including medical and education programs and facilities. TFM's substantial concession is home to 61,000 people, including the separate villages of Tenke and Fungurume. At present TFM employs 5,000 people for the current construction phase and says it will employ 1,000 employees when in operation, but will not come close to GECAMINES' historical maximum work-force of 40,000 in all of Katanga Province, which only produced at most 500,000 metric tons of copper per year. The project, TFM spokesmen said, will give preference to local job-seekers and will "employ" 150 national mine police to supplement its 140 mine guards.

TFM noted it has experienced some labor unrest because of unrealistic employment expectations. Its social development program emphasizes brick and fence-making, agriculture, and other small business activities. TFM moved about 1,800 people in three villages to four new villages with improved, larger housing. TFM says it will implement robust malaria and HIV/AIDS Voluntary Counseling and Testing programs. From an environmental perspective, spokesmen said, the project is committed to a no-waste seepage policy from its tailings reservoir and has invested significantly in its tailing impoundment and monitoring processes. TFM has created a number of "micro-reserves" (surface acreage unknown) to preserve unique, indigenous flora with affinity to copper and cobalt.

License Review - GDRC reopens contracts

18. (SBU) The DRC government began a review of 61 joint venture mining licenses in April 2007 and announced early this year that most contracts are "Category B", indicating the need to renegotiate terms or face contract termination due to alleged unfair or illegal terms. This has made investment in the DRC mining sector more

uncertain, but - like in Zambia - big investors continue to develop their mines. TFM feels that it has been unfairly labeled "Category B" and TFM representatives fear the government may demand an increased share in the project for GECAMINES. The GDRC Review Commission recommended that GECAMINES' share be increased from 17.5% to 45%, a decision the GDRC Review Panel has now accepted. Rasmussen was cautiously critical of the involvement of the Carter Center in the review because, he asserted, its role had not been clearly defined and communicated. Rasmussen said that TFM is continuing to meet with the GDRC and had also scheduled a meeting with Carter Center officials. Rasmussen emphasized that the TFM deal was negotiated with full transparency and is compliant with the DRC Mining Code. He was optimistic that TFM would continue with investment without impediment to reach production later this year. An official from Australian mining company Anvil noted to the team that FMI had previously negotiated a change in the license convention which reduced the GECAMINS share from 45% to 17.5% in exchange for cash and a change in tax payment schedules. According to the official, the Mine Law of 2002 allowed automatic extension of pre-existing partnership conventions, but proscribed changes to these conventions and this could give the GDRC ammunition to seek to increase its parastatal's share-holding.

19. (SBU) COMMENT: The GDRC Mining Concession Review process has been opaque and slow, and much of the current and future contract renegotiations will probably occur without much transparency as well. The prolonged process has prompted critics to warn of a worsening investment climate, but the potential profits of projects such as TFM may be incentive enough to solve differences with the GDRC. Like Lumwana in Zambia, the Tenke Fungurume project represents a new class of copper-cobalt mega-project which exceeds old, traditional projects' dimensions in terms of investment, resources, production, geology, infrastructure, and social development. Freeport's investment, through its acquisition of Phelps Dodge, is remarkable as the biggest U.S. mining investment in southern Africa. An important aspect of Freeport's investment is, according to its representatives, is the great emphasis it places on advancing social development objectives in the DRC. If these objectives are indeed pursued, it will be a welcome change in a country where there is a long and bitter history of antagonism between the Government, mining companies and workers over profits, taxes, and benefits to local populations. Such projects might also help GDRC officials to understand that this new generation of "mega projects," while not employing as many people as used to be the case with GECAMINES during its heyday, is nonetheless beneficial to the country because of its social development projects, the creation of much-needed infrastructure, and the potential revenues to be paid into the national and provincial treasuries. End comment.

110. (SBU) APPENDIX - TFM Resources

Copper/Cobalt Ore Reserves and Resources:

	Tons (millions)	Copper (percent)	Cobalt (percent)
Reserves			
Proven and Probable	100	2.27	0.33

Resources

Measured and Indicated			
Oxide	92	3.25	0.34
Mixed	139	2.82	0.29
Sulfide	4	4.22	0.37
	<hr/>		
Total	235	3.01	0.31
Inferred Resources			
Oxide	70	2.75	0.20
Mixed	176	2.61	0.20
Sulfide	18	1.82	0.13
	<hr/>		
Total	268	2.60	0.19

Major Mining Fleet Items:

- 35 45-ton Caterpillar trucks
- 9 Caterpillar Front-end loaders with 6.3 cubic meter buckets
- 9 Caterpillar Road maintenance vehicles including five dozers
- 2 1000 ton per hour Vermeer continuous surface miners.

Total capital cost for mining fleet is USD 40 million

Final Pit Dimensions (Kwatebala):

2,000 X 750 meters, to an unknown depth

Major Capital Items USD(USD millions)

Mining fleet	USD 40
Copper-Cobalt plant	USD 410
Indirect costs	USD 232
Total	USD 682